Project Study Report – Project Development Support (PSR-PDS) Process and Preparation Procedures – Part Three

California Department of Transportation

December 15, 2011

PSR-PDS Preparation Process

1. Work Programs for PSR-PDS Development
2. Pre-PID Meeting
   Develop Charter and Cooperative Agreement, Framework for Purpose and Need and Concept and Scope, Design Criteria, Identify Deficiencies and Lead Agency
3. Authorization for PID Preparation
4. Obtain and Review Existing Reports, Studies, Mapping or Other Information
5. Form the Project Development Team
6. Develop Consensus on the Project Purpose and Need
7. Review of the Project Site in the Field
8. Identify Additional Data Requirements for Project Scoping
9. Perform the Initial Engineering Analysis and Develop Alternatives
10. Develop Cost Estimates
11. Develop Schedules
12. Risks
13. Quality Management Plan
14. Complete PSR-PDS
15. Caltrans District Review and Approval

Overview

- Perform the Initial Engineering Analysis and Develop Alternatives
  - Traffic Engineering Performance Assessment
  - Stormwater Documentation
  - Right of Way Conceptual Cost Estimate
  - Local and Regional Input
    - Transportation Planning Scoping Information Sheet

Traffic Engineering Performance Assessment (TEPA)

PSR-PDS Guidance Training

Presented By:
HQ Division of Traffic Operations
Jerry Champa, HQ Traffic Operations Liaison Engineer

Traffic Engineering Performance Assessment

OVERVIEW

PURPOSE:

1. Feeds preliminary scope of (construction) work

2. Establishes scope & magnitude of Traffic Study

Traffic Engineering Performance Assessment

OVERVIEW

"**Assessment"** relies upon an evaluation of:

- Existing Highway Corridor
- Preliminary (base) Improvement Plans
- Readily Available Traffic and Performance Data, including:
  - —Traffic Volumes & Forecasts
  - —Collision Data and "Reports"
  - —Congestion Data
  - —Peak and Off-Peak Periods

Traffic Engineering Performance Assessment

OVERVIEW

Preliminary Outcomes/Findings

- Estimate of system performance benefits & impacts
- Identify cause / source of performance deficiencies
- Identify critical traffic elements, systems & strategies for inclusion in preliminary scope of work
- Identify Operations-based alternative?
- Identify the specific traffic studies needed during Project Approval phase

Traffic Engineering Performance Assessment

OVERVIEW

- **Article 5** (Scoping Tool)
  - — Identifies Functional Units
  - — Checklists Can Guide Effort

Traffic Engineering Performance Assessment

- What?
- Why?
- Who?
- How?

NOTE: Answers are provided in the updated “guidance”

Traffic Engineering Performance Assessment

- **WHAT?**
  - See Appendix S – Article 5
  - An engineering ASSESSMENT leading to:
    - Traffic analysis and formal Traffic Study
  - Focus on PERFORMANCE (prior + predicted)
    - Operational & Safety

NOTE: Assessment = Preliminary Estimate
(PSR-PDS does not “lock-in” scope, capital cost, etc.)

Traffic Engineering Performance Assessment

- **WHY?** (See Appendix S – Article 5)
  - Identifies and/or provides information re:
    - Performance Deficiencies (existing) & Causes
    - Infrastructure Omissions
    - Possible Alternatives and Ability to Meet Purpose & Need
    - Complete Scope of Work
      - Especially traffic elements / systems
      - Other features that directly affect performance
    - Major Engineering Decisions
      - Potential Impact of non-standard features
    - Estimate of the Scope and Magnitude of the formal Traffic Engineering Study during Project Approval Phase (PA&ED)

Traffic Engineering Performance Assessment

KEYPOINTS:

1. A complete Traffic Study has 2 components:
   → Operational (mobility) and Safety

2. Why perform comprehensive study?
   → Because every project is an opportunity & threat to system performance
   → "Lessons Learned" from previous projects inform us that (incomplete) scope can create new performance problems.

Traffic Engineering Performance Assessment

- **Who?** (See Appendix S – Article 5)
  - —From Division of Traffic Operations:
    - Functional Managers
      - Highway / Freeway Operations
      - Safety Investigations / Management
      - Electrical / Intelligent Transportation Systems
      - District Traffic Manager
    - Traffic Engineering / Operations Specialists
      - Truck Services Coordinator
      - Safety Systems Coordinator
      - Analysts

Traffic Engineering Performance Assessment

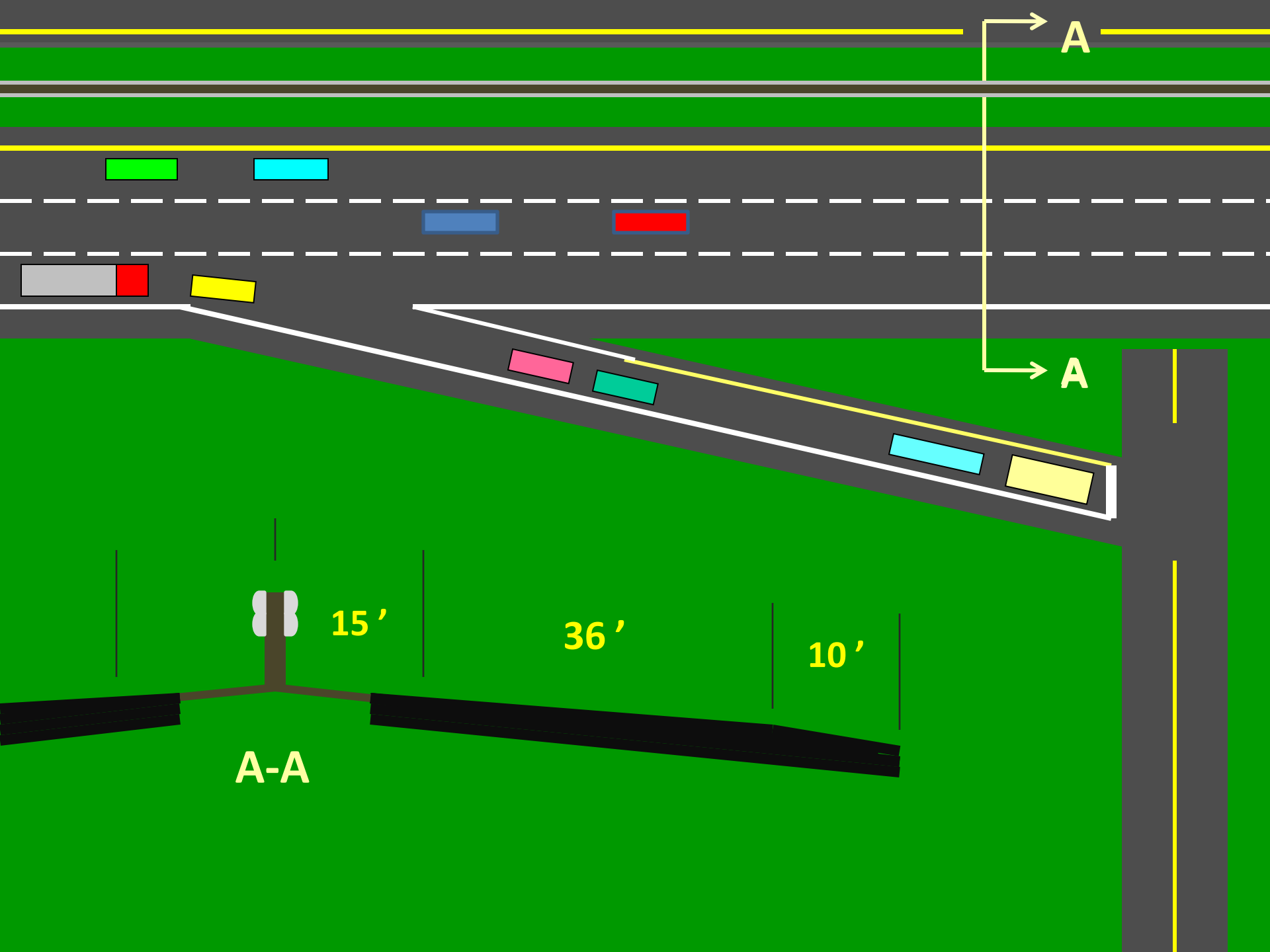
- **HOW?** (See Appendix S – Article 5)

- Consultation with / among:
  - Traffic Operations Functional Managers
  - Specialists

Regarding:

1. The proposal
2. Performance Impacts & Benefits
3. How to Mitigate Impacts
4. What requires (traffic engineering) analysis (during early part of PA&ED phase)

EXAMPLE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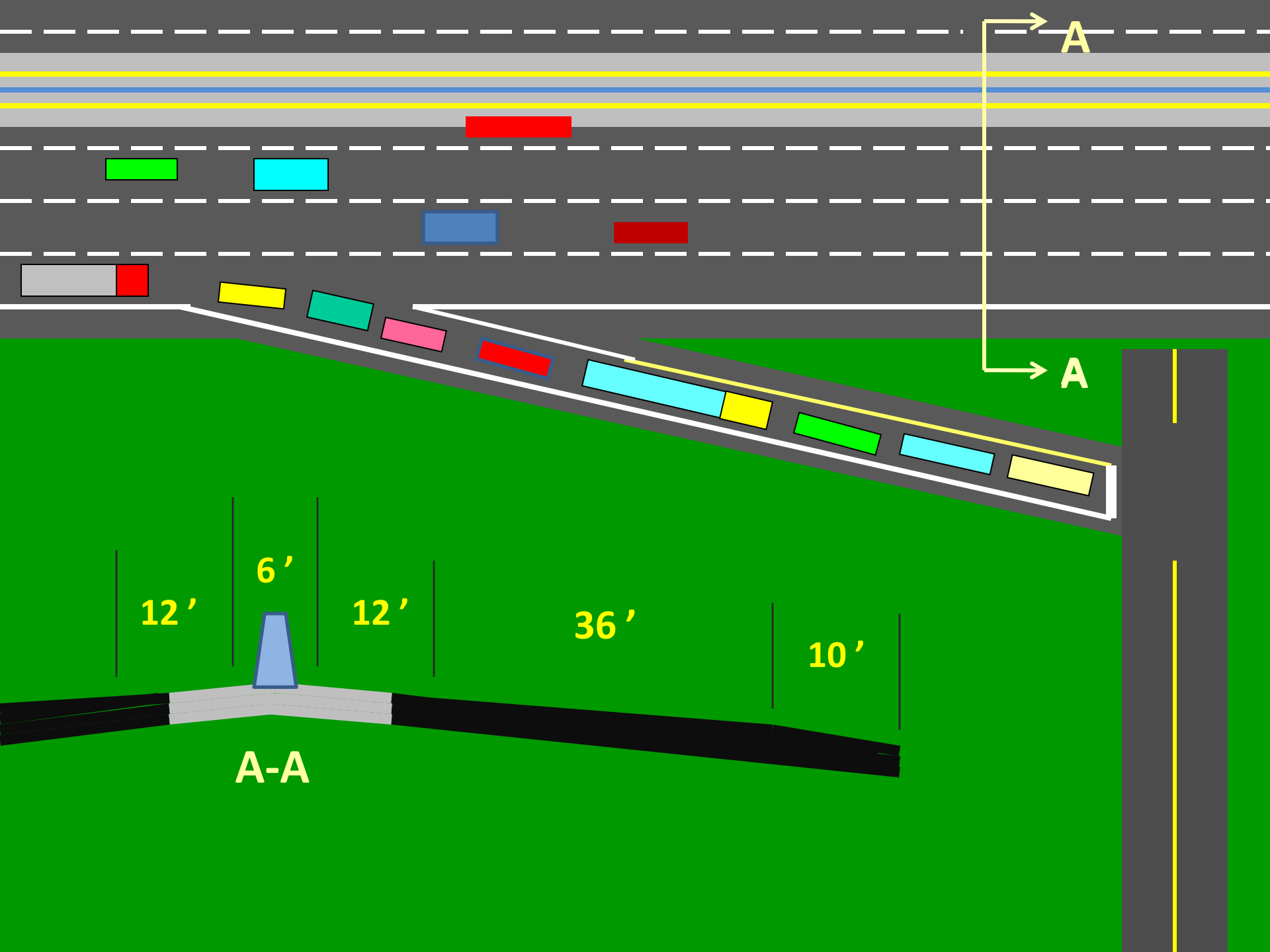
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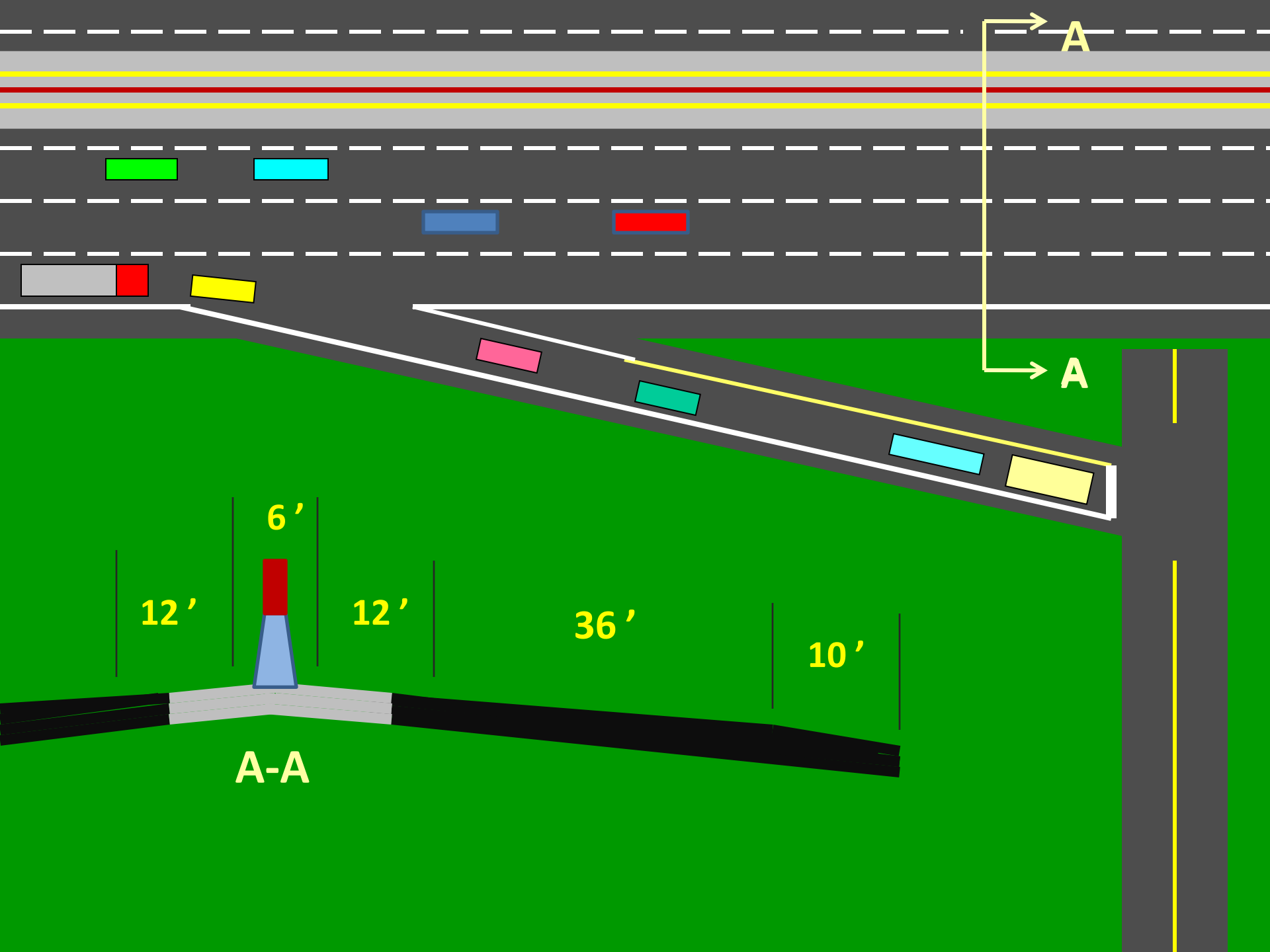
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Traffic Engineering Performance Assessment **SUMMARY**

PRIMARY PURPOSE:

1. To Establish Preliminary Scope of Work

2. To Establish Scope & Magnitude of Traffic Study

Questions